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PRE-APPEAL BRIEF REQUEST FOR REVIEW	4195-035/R9166US		
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States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	10/583,702	June 20, 2006	
Date: July 27, 2009	First Named Inventor:		
	Jean-Marie Musslin		
Signature:			
	Art Unit:	Examiner:	
Typed or printed name: KATHLEEN MCDERMOTT	1797	CAMERON J. ALLEN	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached Note: No more than five (5) pages may be provided.	sheet(s).		
I am the	2 1	1	
applicant/inventor			
	Signatu	ıre	
assignee of record of the entire interest.	Larry L. C	Coats	
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.			
(Form PTO/SB/96)	Typed or Printe	ed Name	
attorney or agent of record			
Registration Number: 25,620	(919) 854-18		
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attorney or agent acting under 37 CFR 1.34.	July 27, 2	nna	
Registration Number if acting under 37 CFR 1.34	Date		
NOTE: Signatures of all the inventors or assignees of record of the entire interest of		bmit multiple	
forms if more than one signature is required, see below*.			
*Total of form(s) is/are submitted.			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of Musslin et al.	) Patent Pending ) Examiner: Cameron J. Allen	
Serial No.: 10/583,702	) Croup Art Unit: 1797	
Filed: June 20, 2006	) Confirmation No.: 3496	
For: Supply Device for Ultraviolet Lamps Used in the Treatment of Water	,	
Attorney's Docket No: 4195-035	)	
Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]  I hereby certify that this correspondence is being:  deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.  transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 273-8300.  July 27, 2009  Date  Mathy McDermott	

## ARGUMENTS SUPPORTING PRE-APPEAL REQUEST FOR REVIEW

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Applicants submit the following remarks in support of the Pre-Appeal Request for Review being filed concurrently with a Notice of Appeal.

Claims 12-35 are currently pending with claims 12, 21, and 25 being independent. All independent claims stand rejected as being obvious over U.S. Patent Publication No. 2003/0015478 (Kuennen) in view of U.S. Patent No. 6,181,076 (Trestman). The § 103 rejections fail, however, because the Patent Office fails to make out a *prima facie* case of obviousness.

Claims 12, 21, and 25 each require first and second electrical circuits. The first electrical circuit is disposed in the immediate vicinity of the discharge lamps and is configured to control a <u>warm up phase</u> of the discharge lamps. The second electrical circuit is disposed remotely from the discharge lamps and is configured to control an <u>operational phase</u> of the discharge lamps. Representative claim 12 appears below.

- 12. A water treatment device comprising:
  - at least two discharge lamps for photo-chemically treating water;
  - a first electrical circuit disposed in the immediate vicinity of the discharge lamps and electrically connected to the discharge lamps, wherein the first electrical circuit is configured to control a warm up phase of the discharge lamps; and
  - a second electrical circuit disposed remotely from the discharge lamps and electrically connected to the first electrical circuit, wherein the second electrical circuit is configured to control an operational phase of the discharge lamps.

The Examiner acknowledges that Kuennen does not describe "the use of two starter circuits, one for warm up and the other for control." Action, p. 3. Accordingly, the Examiner cites Trestman for disclosing these limitations and argues it would be obvious to combine the teachings of Kuennen with Trestman. Action p. 3. However, as described below, the Examiner has failed to provide *any* motivation or articulated reasoning to support the obviousness rejection. In addition, neither Kuennen nor Trestman describe the claimed relative positions of the first and second circuits. Finally, one of ordinary skill in the art would not modify Kuennen in view of Trestman, as suggested by the Examiner.

In the Action, the Examiner never provides any reason as to why one of ordinary skill in the art would combine the teachings of Kuennen with Trestman to support the rejection of claims 12, 21, and 25. Instead, the Examiner only states in reference to Trestman's figure that "one of ordinary skill will see that lamp 5 is located next to inverter circuit 4 in electrical communication with control circuit located between inverter 4 and the power source 1." Action, p. 4. However, the Examiner never explains why one of ordinary skill in the art would modify the primary reference, Kuennen, to include the circuitry of Trestman. MPEP § 2141 states that

Appeal Brief for Application Ser. No. 10/583,702 Attorney Docket No. 4195-035 Client Ref. No. R9166US

mere conclusory statements cannot support an obviousness rejection. See, KSR v. Telefex, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988). Instead, the Examiner must set forth some "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* Because the Examiner has failed to provide *any* reason why it would be obvious to combine the teachings of Kuennen and Trestman, the § 103 rejection of claims 12, 21, and 25 must fail as a matter of law.

Moreover, nothing in Trestman describes the claimed relative positions of the first and second circuits, as suggested by the Examiner. As stated above, the Examiner states that "lamp 5 is located next to inverter circuit 4 in electrical communication with control circuit located between inverter 4 and the power source 1." Action, p. 4, (emphasis added). Thus, the Examiner argues that circuit 4 is the alleged first circuit and is disposed in the immediate vicinity of the lamps while the control circuit is the alleged second circuit and is disposed remote from the lamps. However, the Examiner has mischaracterized the teachings of Trestman. Nothing in Trestman describes that the control circuit is located between circuit 4 and the power source, as suggested by the Examiner. Instead, Trestman states that the "control circuit [6] is connected between the power source and the [circuit] 4." See, Trestman, col. 2, lines 55-57 (emphasis added) (note connections to circuit 4 on either side of R1 in Trestman's figure). Trestman explains that control circuit 6 is the circuit that controls the normal operation of the lamp 5. For example, Trestman describes that circuit 4, which supplies power to lamp 5, generates an AC voltage determined by control circuit 6. See, Trestman, col. 3, lines 4-6. In addition, Trestman explains that the control loop, within control circuit 6, keeps the input to the circuit 4 constant during the normal operating phase of the lamp. See, Trestman, col. 3, lines 50-67. Thus, one of ordinary skill in the art understands that control circuit 6 controls the normal operation of lamp 5. However, nothing in Trestman describes that the control circuit 6 is disposed remote from lamp 5 while the circuit 4 is disposed in the immediate vicinity of lamp 5. For example, as

Appeal Brief for Application Ser. No. 10/583,702 Attorney Docket No. 4195-035 Client Ref. No. R9166US

shown in Trestman's figure, control circuit 6, in its entirety, is not disposed farther away from the lamp 5 than circuit 4. Instead, the circuit 4 and control circuit 6 appear to be disposed approximately the same distance from lamp 5. For this additional reason, the Examiner has failed to show how Kuennen in view of Trestman describes each of the claimed limitations.

Applicants note that no other circuitry in Trestman can be the alleged second circuit which controls the operational phase of the lamps, as claimed. For example, elements 1, 2, and 3 merely provide the proper amount of signal to the circuit 4. Trestman describes that EMI filter 1 is merely a filter that reduces the interference from the AC line and provides output to bridge rectifier 2 which provides rectified sinusoid output to power factor correction converter (PFC) 3. Trestman, col. 2, lines 59-66. The PFC converter 3 reduces line harmonic distortion and generates DC voltage to inverter 4. Trestman, col. 2, line 66 through col. 3, line 3. Accordingly, these elements do not control the operational phase of the lamp 5, but instead, merely provide a power signal to circuits 4 and 6.

In addition, the Examiner has not provided any explanation as to how a person of ordinary skill in the art would actually modify Kuennen with the teachings of Trestman. Kuennen describes that its system runs at approximately 100 kHz. *See*, Kuennen, ¶ [0047]. In contrast the Trestman system runs at approximately 300 kHz. *See*, Trestman, col. 2, lines 42-49. It would not be obvious to one of ordinary skill in the art to use circuitry designed for 300 kHz operation to power lamps designed to work at a much lower frequency of approximately 100 kHz. Indeed, applying too much power to the lamps would cause the filaments in the lamps to burn out. Accordingly, one of ordinary skill in the art would not modify Kuennen in view of Trestman, as suggested by the Examiner.

In addition, independent claim 25 requires the first circuit be disposed less than 0.5 meters from the discharge lamps while the second circuit is disposed at least 2.0 meters from the discharge lamps. In rejecting claim 25, the Examiner states that it would be obvious to

Appeal Brief for Application Ser. No. 10/583,702 Attorney Docket No. 4195-035

Client Ref. No. R9166US

position Trestman's circuits accordingly to the claim language because "relocation of parts is

within the ordinary skill of one in the art." See, Action, p. 6. However, it is improper for the

Examiner to reject a claim while only providing the statement that "relocation of parts is within

the ordinary skill of one in the art." MPEP § 2144.04 clearly states that "[t]he mere fact that a

worker in the art could rearrange the parts of the reference device to meet the terms of the

claims...is not by itself sufficient to support a finding of obviousness. The prior art must provide

a motivation or reason for the worker in the art, without the benefit of appellant's specification, to

make the necessary changes in the reference device." Ex parte Chicago Rawhide Mfg. Co.,

223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984). The Examiner has not provided any reason

why one of ordinary skill in the art would modify the positioning of Trestman's circuitry.

Accordingly, the Examiner has failed to set forth a prima facie case of obviousness.

In addition, as described in Applicants' specification, the claimed spacing of the claimed

first and second electrical circuits allow the operational components in the second circuit to be

disposed away from the water and thus, eliminates the need for protective coverings over the

operational components that would otherwise be needed if these components were disposed

near the water. Thus, the claimed positioning of the first and second electrical circuits is not a

mere relocation of parts, but instead provides a novel and unique way to eliminate the need of

protective coverings disposed over the operational components in many water treatment

systems.

In light of the foregoing remarks, Applicants respectfully requests that the Panel overturn

all rejections and allow all pending claims.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

Dated: July 27, 2009

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5